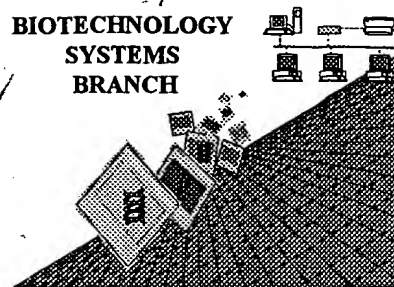


RAW SEQUENCE LISTING

ERROR REPORT

1632
✓
BIOTECHNOLOGY
SYSTEMS
BRANCH



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following CRF diskette:

Application Serial Number: 09/164714
Art Unit / Team No. : 01PE
Date Processed by STIC: 10/14/98

THE ATTACHED PRINTOUT EXPLAINS THE ERRORS DETECTED.

PLEASE BE SURE TO FORWARD THIS INFORMATION TO THE APPLICANTS BY EITHER:

1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANTS ALONG WITH A NOTICE TO COMPLY or,

2) CALLING APPLICANTS AND FAXING THEM A COPY OF THE PRINTOUT WITH A NOTICE TO COMPLY

THIS WILL INSURE THAT THE NEXT SUBMISSION RECEIVED FROM THEM WILL BE ERROR FREE.

IF YOU HAVE ANY FURTHER QUESTIONS, PLEASE CALL:

ARTI SHAH 703-308-4212

Raw Sequence Listing Error Summary

ERROR DETECTED SUGGESTED CORRECTION

SERIAL NUMBER: 09/164,714

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics The number/text at the end of each line "wrapped" down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".
- 2 Wrapped Aminos The amino acid number/text at the end of each line "wrapped " down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".
- 3 Incorrect Line Length The rules require that a line not exceed 72 characters in length. This includes spaces.
All text must be visible on page.
- 4 Misaligned Amino Acid The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs
Numbering between the numbering. It is recommended to delete any tabs and uses spacing between the numbers.
- 5 Non-ASCII This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.
Please ensure your subsequent submission is saved in ASCII text so that it can be processed.
- 6 Variable Length Sequence(s) contain n's or Xaa's which represented more than one residue.
As per the rules, each n or Xaa can only represent a single residue.
Please present the maximum number of each residue having variable length and
indicate in the (ix) features section that some may be missing.
- 7 Wrong Designation Sequence(s) contain amino acid or nucleic acid designators which are not standard
representations as per the Sequence Rules (Please refer to paragraph 1.822)
- 8 Skipped Sequences Sequence(s) missing. If intentional, please use the following format for each skipped sequence:
(OLD RULES) (2) INFORMATION FOR SEQ ID NO:X:
 (1) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS")
 (x1) SEQUENCE DESCRIPTION:SEQ ID NO:X:
 This sequence is intentionally skipped

Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).
- 9 Skipped Sequences Sequence(s) missing. If intentional, please use the following format for each skipped sequence.
(NEW RULES) <210> sequence id number
 <400> sequence id number
 000
- 10 Use of N's or Xaa's Use of N's and/or Xaa's have been detected in the Sequence Listing.
(NEW RULES) Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
- 11 Use of <213>Organism Sequence(s) are missing this mandatory field or its response.
(NEW RULES)
- 12 Use of <220>Feature Sequence(s) are missing the <220>Feature and associated headings.
(NEW RULES) Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial" or "Unknown"
 (See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32)
 (Sec. 1.823 of new Sequence Rules)
- 13 Wrong Format File submitted was in the alphabetical heading format of the Old Sequence Rules. This is invalid since the
 "Requirements for Patent Applications Containing Nucleotide Sequence and/or Amino Acid Disclosures"
 Federal Register Notice, Vol. 63, No. 104, June 1, 1998, p. 29620
 applies to applications filed on or after July 1, 1998.

AKS-Biotechnology Systems Branch- 7/10/98

99 JAN 27 PM 2:37
 GROUP 180

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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/164,714

DATE: 10/14/98

TIME: 14:13:51

Input Set: I164714.RAW

This Raw Listing contains the General Information
Section and up to first 5 pages.

new format

*Does Not Comply
Corrected Diskette Needed*

1 <110> APPLICANT: Tucker, Kenneth D.
2 Tillmann, Ulrich F.
3 <120> TITLE OF INVENTION: MORAXELLA CATARRHALIS OMP21 POLYPEPTIDE, GENE SEQUENCE
4 AND USES THEREOF
5 <130> FILE REFERENCE: 7969-074
6 <140> CURRENT APPLICATION NUMBER: US/09/164,714
7 <141> CURRENT FILING DATE: 1998-10-01
8 <160> NUMBER OF SEQ ID NOS: 21
9 <170> SOFTWARE: PatentIn Ver. 2.0
10 <210> SEQ ID NO 1
11 <211> LENGTH: 40
12 <212> TYPE: PRT
13 <213> ORGANISM: Moraxella catarrhalis
14 <400> SEQUENCE: 1
15 Ala Ile Ser Tyr Gly Asn Ser Ala Asp Ala Gln Pro Tyr Val Gly Ala
16 1 5 10 15
17 Lys Ile Gly Gln Val Asp Ala Lys Gln Ile Asn Gly Lys Asn Thr Ala
18 20 25 30
19 Tyr Gly Ile Tyr Ala Gly Tyr Asn
20 35 40
21 <210> SEQ ID NO 2
22 <211> LENGTH: 17
23 <212> TYPE: DNA
24 <213> ORGANISM: Artificial Sequence
25 <220> FEATURE:
26 <223> OTHER INFORMATION: Description of Artificial Sequence:PRIMER
27 <400> SEQUENCE: 2
W--> 28 gaygcacarc ctataygt *see item 10 on Enon summary sheet* 17
29 <210> SEQ ID NO 3
30 <211> LENGTH: 17
31 <212> TYPE: DNA
32 <213> ORGANISM: Artificial Sequence
33 <220> FEATURE:
34 <223> OTHER INFORMATION: Description of Artificial Sequence:PRIMER
35 <400> SEQUENCE: 3
W--> 36 tgyttngcrt cnacytg *see item 10* 17
37 <210> SEQ ID NO 4
38 <211> LENGTH: 20
39 <212> TYPE: DNA
40 <213> ORGANISM: Artificial Sequence
41 <220> FEATURE:
42 <223> OTHER INFORMATION: Description of Artificial Sequence:PRIMER
43 <400> SEQUENCE: 4
W--> 44 gcngaygcnc arccntaygt *see item 10* 20

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RAW SEQUENCE LISTING PATENT APPLICATION US/09/164,714

DATE: 10/14/98
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Input Set: I164714.RAW

45 <210> SEQ ID NO 5
 46 <211> LENGTH: 20
 47 <212> TYPE: DNA
 48 <213> ORGANISM: Artificial Sequence
 49 <220> FEATURE:
 50 <223> OTHER INFORMATION: Description of Artificial Sequence:PRIMER
 51 <400> SEQUENCE: 5
 52 atnccrtang cngtrtattytt *su jin 10* 20
 53 <210> SEQ ID NO 6
 54 <211> LENGTH: 543
 55 <212> TYPE: DNA
 56 <213> ORGANISM: MORAXELLA CATARRHALIS
 57 <400> SEQUENCE: 6
 58 atgaaaactt taaaaaactt attggcagta tcagcttctt cgttattggc gatgagtgc 60
 59 aacgctgcc aacgctatgg caattctgct gatgctcaac cctatgttgg tgccaaaatt 120
 60 ggtcaagtag acgccaagca aatcaacggt aagaacaccg cttatggtat ttatgcaggt 180
 61 tataactttg accaaaattt tggcgtagaa cccgaatttg ttggttcaga cgccaaagaa 240
 62 tttaatgcag gcgtgagtc tgtaaaaggt gatgtgaagt cttttggtgc ttatggcaca 300
 63 tatcgctata acttcatcaa taccctattt tatgccaagg gcaaattagg cattgctaag 360
 64 actaaagtag atgttaccag ccgtaatgca actacatact caaacaagaa cgacaaaacc 420
 65 agcctagcag gcggtgttgg tgttggtctt aaaccattag caaatgtggg cgttgaagca 480
 66 agctacaact atctatcaga agatgccaat gcaattagtt tgggcgctca tttggctttt 540
 67 taa 543
 68 <210> SEQ ID NO 7
 69 <211> LENGTH: 180
 70 <212> TYPE: PRT
 71 <213> ORGANISM: Moraxella catarrhalis
 72 <400> SEQUENCE: 7
 73 Met Lys Thr Leu Lys Thr Leu Leu Ala Val Ser Ala Ser Ser Leu Leu
 74 1 5 10 15
 75 Ala Met Ser Ala Asn Ala Ala Ile Ser Tyr Gly Asn Ser Ala Asp Ala
 76 20 25 30
 77 Gln Pro Tyr Val Gly Ala Lys Ile Gly Gln Val Asp Ala Lys Gln Ile
 78 35 40 45
 79 Asn Gly Lys Asn Thr Ala Tyr Gly Ile Tyr Ala Gly Tyr Asn Phe Asp
 80 50 55 60
 81 Gln Asn Phe Gly Val Glu Ala Glu Phe Val Gly Ser Asp Ala Lys Glu
 82 65 70 75 80
 83 Phe Asn Ala Gly Val Ser Pro Val Lys Gly Asp Val Lys Ser Phe Gly
 84 85 90 95
 85 Ala Tyr Gly Thr Tyr Arg Tyr Asn Phe Ile Asn Thr Pro Phe Tyr Ala
 86 100 105 110
 87 Lys Gly Lys Leu Gly Ile Ala Lys Thr Lys Val Asp Val Thr Ser Arg
 88 115 120 125
 89 Asn Ala Thr Thr Tyr Ser Asn Lys Ser Asp Lys Thr Ser Leu Ala Gly
 90 130 135 140
 91 Gly Val Gly Val Gly Phe Lys Pro Leu Ala Asn Val Gly Val Glu Ala
 92 145 150 155 160
 93 Ser Tyr Asn Tyr Leu Ser Glu Asp Ala Asn Ala Ile Ser Leu Gly Ala
 94 165 170 175

W-->

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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/164,714DATE: 10/14/98
TIME: 14:13:51

Input Set: I164714.RAW

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95      His Leu Ala Phe
96      180
97      <210> SEQ ID NO 8
98      <211> LENGTH: 28
99      <212> TYPE: DNA
100     <213> ORGANISM: Artificial Sequence
101     <220> FEATURE:
102     <223> OTHER INFORMATION: Description of Artificial Sequence:PRIMER
103     <400> SEQUENCE: 8
104     ccctatgttg gtgcaaaat tggtaag      28
105     <210> SEQ ID NO 9
106     <211> LENGTH: 28
107     <212> TYPE: DNA
108     <213> ORGANISM: Artificial Sequence
109     <220> FEATURE:
110     <223> OTHER INFORMATION: Description of Artificial Sequence:PRIMER
111     <400> SEQUENCE: 9
112     agatgccaag caaatcaacg gtaagaac      28
113     <210> SEQ ID NO 10
114     <211> LENGTH: 28
115     <212> TYPE: DNA
116     <213> ORGANISM: Artificial Sequence
117     <220> FEATURE:
118     <223> OTHER INFORMATION: Description of Artificial Sequence:PRIMER
119     <400> SEQUENCE: 10
120     gttcttaccg ttgatttgct tggcatct      28
121     <210> SEQ ID NO 11
122     <211> LENGTH: 28
123     <212> TYPE: DNA
124     <213> ORGANISM: Artificial Sequence
125     <220> FEATURE:
126     <223> OTHER INFORMATION: Description of Artificial Sequence:PRIMER
127     <400> SEQUENCE: 11
128     cttgaccaat tttggcacca acataggg      28
129     <210> SEQ ID NO 12
130     <211> LENGTH: 18
131     <212> TYPE: DNA
132     <213> ORGANISM: Artificial Sequence
133     <220> FEATURE:
134     <223> OTHER INFORMATION: Description of Artificial Sequence:PRIMER
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136     gcgacaaaac cagcctag      18
137     <210> SEQ ID NO 13
138     <211> LENGTH: 18
139     <212> TYPE: DNA
140     <213> ORGANISM: Artificial Sequence
141     <220> FEATURE:
142     <223> OTHER INFORMATION: Description of Artificial Sequence:PRIMER
143     <400> SEQUENCE: 13
144     ggtgttggtg ttggcttt      18
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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/164,714DATE: 10/14/98
TIME: 14:13:51

Input Set: I164714.RAW

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145 <210> SEQ ID NO 14
146 <211> LENGTH: 20
147 <212> TYPE: DNA
148 <213> ORGANISM: Artificial Sequence
149 <220> FEATURE:
150 <223> OTHER INFORMATION: Description of Artificial Sequence:PRIMER
151 <400> SEQUENCE: 14
152      cccctttaaa acatcgccac                                20
153 <210> SEQ ID NO 15
154 <211> LENGTH: 45
155 <212> TYPE: DNA
156 <213> ORGANISM: Artificial Sequence
157 <220> FEATURE:
158 <223> OTHER INFORMATION: Description of Artificial Sequence:COMPOSIT PRIMER
159 <400> SEQUENCE: 15
160      ggacgccatg gcaactttaa aaacactatt ggcagtatca gcttc          45
161 <210> SEQ ID NO 16
162 <211> LENGTH: 45
163 <212> TYPE: DNA
164 <213> ORGANISM: Artificial Sequence
165 <220> FEATURE:
166 <223> OTHER INFORMATION: Description of Artificial Sequence:COMPOSIT PRIMER
167 <400> SEQUENCE: 16
168      atcaagctta gtgatggtga tggatgatgaa aagccaaatg agcgc          45
169 <210> SEQ ID NO 17
170 <211> LENGTH: 40
171 <212> TYPE: DNA
172 <213> ORGANISM: Artificial Sequence
173 <220> FEATURE:
174 <223> OTHER INFORMATION: Description of Artificial Sequence:COMPOSIT PRIMER
175 <400> SEQUENCE: 17
176      gacggcccg gctggtatca attggcatag gcgtaagtt          40
177 <210> SEQ ID NO 18
178 <211> LENGTH: 38
179 <212> TYPE: DNA
180 <213> ORGANISM: Artificial Sequence
181 <220> FEATURE:
182 <223> OTHER INFORMATION: Description of Artificial Sequence:COMPOSIT PRIMER
183 <400> SEQUENCE: 18
184      catgctgcag cttgaccaat tttggcacca acataggg          38
185 <210> SEQ ID NO 19
186 <211> LENGTH: 40
187 <212> TYPE: DNA
188 <213> ORGANISM: Artificial Sequence
189 <220> FEATURE:
190 <223> OTHER INFORMATION: Description of Artificial Sequence:COMPOSIT PRIMER
191 <400> SEQUENCE: 19
192      cactctgcag tagacgcaa gcaaatcaac ggtaagaaca          40
193 <210> SEQ ID NO 20
194 <211> LENGTH: 40
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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/164,714DATE: 10/14/98
TIME: 14:13:51

Input Set: I164714.RAW

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196 <213> ORGANISM: Artificial Sequence
197 <220> FEATURE:
198 <223> OTHER INFORMATION: Description of Artificial Sequence:COMPOSIT PRIMER
199 <400> SEQUENCE: 20
200      gcatgtcgac gtagatgagc tacaaggcgt gatttgggat      40
201 <210> SEQ ID NO 21
202 <211> LENGTH: 80
203 <212> TYPE: DNA
204 <213> ORGANISM: Artificial Sequence
205 <220> FEATURE:
206 <223> OTHER INFORMATION: Description of Artificial Sequence:DNA FRAGMENT
207 <400> SEQUENCE: 21
208      gacgcscarc cstatgttgg tgccaaaatt ggtcaagtag acgccaagca aatcaacggt 60
209      aagaacaccg cctacggaat      80
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VERIFICATION SUMMARY
PATENT APPLICATION US/09/164,714DATE: 10/14/98
TIME: 14:13:51

Input Set: I164714.RAW

Line ? Error/Warning

Original Text

28 W "N" or "Xaa" used: Feature required

gaygcncarc cntaygt

36 W "N" or "Xaa" used: Feature required

tgyttngcrt cnacytg

44 W "N" or "Xaa" used: Feature required

gcngaygcnc arcCNTaygt

52 W "N" or "Xaa" used: Feature required

atncCrtang cngtrtTytT